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antibody and ELISA experts

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Anti-Rad9/Rad9a Antibody Picoband™

Catalog Number: A04161-1

About Rad9a

This gene product is highly similar to Schizosaccharomyces pombe rad9, a cell cycle checkpoint protein required for cell cycle arrest and DNA damage repair. This protein possesses 3' to 5' exonuclease activity, which may contribute to its role in sensing and repairing DNA damage. It forms a checkpoint protein complex with RAD1 and HUS1. This complex is recruited by checkpoint protein RAD17 to the sites of DNA damage, which is thought to be important for triggering the checkpoint-signaling cascade. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

Overview

Product Name	Anti-Rad9/Rad9a Antibody Picoband™
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-Rad9/Rad9a Antibody Picoband™ catalog # A04161-1. Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Mouse, Rat.
Application	ELISA, Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q9Z0F6

Technical Details

Immunogen	E.coli-derived mouse Rad9/Rad9a recombinant protein (Position: M1-G389).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.

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Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.25-0.5ug/ml, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Mouse, Rat Flow Cytometry, 1-3ug/1x10^6 cells, Mouse Direct ELISA, 0.1-0.5ug/ml, Mouse

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Anti-Rad9/Rad9a Antibody Picoband™ (A04161-1) Images

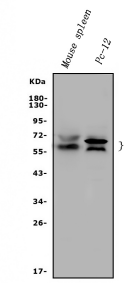

Figure 1. Western blot analysis of Rad9/Rad9a using anti-Rad9/Rad9a antibody (A04161-1).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: mouse spleen tissue lysates,
Lane 2: rat PC-12 whole cell lysates.
After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Rad9/Rad9a antigen affinity purified polyclonal antibody (Catalog # A04161-1) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Rad9/Rad9a at approximately 55-60KD. The expected band size for Rad9/Rad9a is at 42KD.

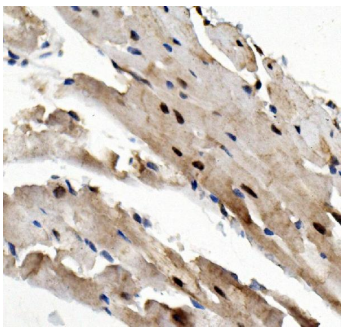

Figure 2. IHC analysis of Rad9/Rad9a using anti-Rad9/Rad9a antibody (A04161-1).
Rad9/Rad9a was detected in paraffin-embedded section of mouse cardiac muscle tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Rad9/Rad9a Antibody (A04161-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

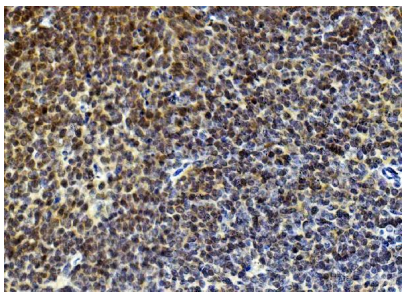

Figure 3. IHC analysis of Rad9/Rad9a using anti-Rad9/Rad9a antibody (A04161-1).
Rad9/Rad9a was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Rad9/Rad9a Antibody (A04161-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

Figure 4. IHC analysis of Rad9/Rad9a using anti-Rad9/Rad9a antibody (A04161-1).

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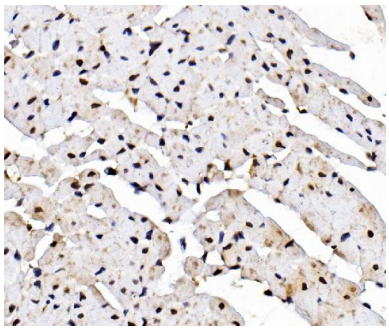

Rad9/Rad9a was detected in paraffin-embedded section of rat cardiac muscle tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Rad9/Rad9a Antibody (A04161-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

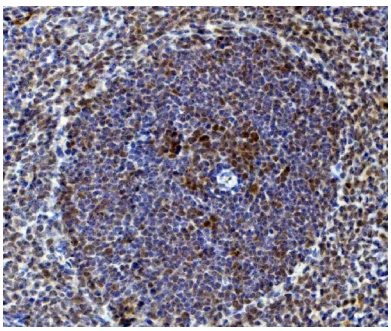

Figure 5. IHC analysis of Rad9/Rad9a using anti-Rad9/Rad9a antibody (A04161-1).
Rad9/Rad9a was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Rad9/Rad9a Antibody (A04161-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

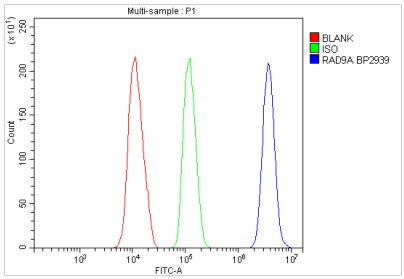

Figure 6. Flow Cytometry analysis of HEPA1-6 cells using anti-Rad9/Rad9a antibody (A04161-1).
Overlay histogram showing HEPA1-6 cells stained with A04161-1 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Rad9/Rad9a Antibody (A04161-1,1ug/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.